

IN THE CLAIMS

The listing of the claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for expanding addressing capability of a plurality of registers connected to an interface comprising:
 - designating at least two of the plurality of registers as a block of registers;
 - providing a plurality of such blocks of registers;
 - designating a first register within the plurality of registers that is separate from the blocks of registers ~~as a location register~~ for selectively characterizing at least one of such blocks of registers as an indicated block of registers; and
 - designating a second register within the plurality of registers that is separate from the blocks of registers ~~as a control register~~ for specifying at least one operation for the indicated block of registers.
2. (original) A method according to Claim 1, wherein the first register includes a block selector for selectively characterizing at least one of such blocks of registers as an indicated block of registers.
3. (original) A method according to Claim 1, wherein the second register includes an operational code.
4. (original) A method according to Claim 3, wherein the second register includes a port indicator.
5. (currently amended) A method according to Claim 1, wherein said first register comprises a pointer to a plurality of location registers, each of the plurality of location registers indicating ~~a register block~~ at least one such blocks of registers and wherein said second register comprises a pointer to a plurality of control registers, each of the plurality of control registers comprising an operational code, and wherein said plurality of location registers are associated with said plurality of control registers such that a first operational code is associated with a first of such blockblocks of registers and a second operational code is associated with a second of such blockblocks of registers.
6. (original) A method according to Claim 1, wherein said location and control registers comprise registers compatible with IEEE standard 802.3 clause 22.

7. (original) A system for expanding the addressing capability of a plurality of registers, the system comprising:
- a plurality of blocks of registers, each block of registers having at least two registers;
 - a location register separate from the plurality of blocks of registers for selectively characterizing at least one of the blocks of registers as a specified block of registers;
 - a control register separate from the plurality of blocks of registers for selecting at least one operational code for the specified block of registers and specifying at least one port number for the specified block of registers; and
 - a control engine operable to access the operational code for the specified block of registers and act on the specified block of registers at each of the specified port numbers in accordance with the operational code.
8. (original) A system according to Claim 7, wherein the operational code specifies an operation to be performed on the specified block of registers.
9. (original) A system according to Claim 8, wherein the operation is restricting the specified block of registers to read operations only.
10. (original) A system according to Claim 7, wherein the operational code specifies control sequencing information.
11. (original) A system according to Claim 10, wherein the control sequencing information instructs the control engine to proceed to a next block after completing operations with the specified block.
12. (original) A system according to Claim 7, wherein said location register includes a block selector indicating said block.
13. (original) A system according to Claim 7, wherein said location register includes a pointer to a block selector.
14. (currently amended) A system according to Claim 7, wherein said location register includes a pointer to a plurality of location registers, each of the plurality of location registers including a block selector.
15. (original) A system according to Claim 7, wherein said control register is operable to store an operational code.

16. (original) A system according to Claim 15, wherein said control register is further operable to store a register indicator indicative of a register within said block.

17. (original) A system according to Claim 15, wherein said control register is further operable to store a port indicator.

18. (original) A system according to Claim 7, wherein said control register is operable to specify a plurality of ports.

19. (currently amended) A system according to Claim 7, wherein said control register includes a pointer to a plurality of ~~third-control~~ registers, each having an operational code.

20. (currently amended) A system according to Claim 7, wherein said location register includes a pointer to a plurality of location registers, each indicating a register block and wherein said control register includes a pointer to a plurality of control registers, each control register storing an operational code, and wherein said plurality of ~~block-indicator~~ location registers are associated with said plurality of control registers such that a first operational code is associated with a first block and a second operational code is associated with a second block.

21. (original) A system according to Claim 7, wherein said at least one operation is selected from the group of operations consisting of pointer handling and stream looping.

22. (currently amended) A system according to Claim 7, wherein said ~~location~~ location and control registers are registers specified by IEEE standard 802.3 clause 22.

23. (cancelled)

24. (cancelled)

25. (original) A system according to Claim 7 further comprising:
a mask register following the location register and specifying a mask for the specified block of registers.

26. (new) A method for expanding addressing capability of a plurality of registers, comprising:

designating at least two of the plurality of registers as a block of registers;

providing a plurality of such blocks of registers;

designating a first register within the plurality of registers that is separate from the blocks of registers or for selectively characterizing at least one of such blocks of registers as an

indicated block of registers, the first register including a pointer to a plurality of location registers that each indicates at least one of the blocks of registers;

designating a second register within the plurality of registers that is separate from the blocks of registers for specifying at least one operation for the indicated block of registers, the second register including a pointer to a plurality of control registers in which each control register includes an operational code; and

associating said plurality of location registers with said plurality of control registers such that a first operational code is associated with a first of such blocks of registers and a second operation code is associated with a second of such blocks of registers.

27. (new) A method according to Claim 26, wherein the first register further comprises a block selector for selectively characterizing at least one of such blocks of registers as an indicated block of registers.

28. (new) A method according to Claim 26, wherein the second register further comprises a port indicator.

29. (new) A method according to Claim 26, wherein said location and control registers comprise registers compatible with IEEE standard 802.3 clause 22.